





March 8, 2013

Mary Nichols, Chairman California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Re: Cap-and-Trade Auction Proceeds Investment Plan

Dear Chairman Nichols:

The Placer County Air Pollution Control District, Northern California Society of American Foresters, and the California Licensed Foresters Association are pleased to have the opportunity to submit comments on the Air Resources Board Draft Concept Paper for the Cap-and-Trade Auction Proceeds Investment Plan. Due to the significant impacts of wildfire on the forested landscapes and the health and welfare of California residents, these three organizations are providing consolidated comments.

The Placer County Air Pollution Control District is a special district created by state law to enforce local, state and federal air pollution regulations. The primary focus of the Air District is to achieve and maintain clean air standards throughout Placer County. Placer County stretches from the north shore of Lake Tahoe to the Sacramento Valley floor and includes approximately 550,000 acres of forests. Due to almost a century of successful wildfire suppression activities, much of the county's forest landscapes are at significant risk to catastrophic wildfire. Since 2001, Placer County has experienced six major wildfire events impacting over 55,000 acres of forest. Most of the wildfire impacts were concentrated in the upland watersheds.

The Society of American Foresters, with over 15,000 members, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Northern California section of SAF has about 600 members. The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

The California Licensed Foresters Association, with a membership responsible for the sustained management of millions of acres of California forestland, represents the common interests of the California Registered Professional Foresters. The Association







provides opportunities for continuing education and public outreach to its membership, which includes professionals affiliated with government agencies, private timber companies, consultants, the public, and the academic community. Governed by an elected Board of Directors, CLFA was established in 1980 after the passage of the landmark California Professional Foresters Law.

Protection of California's Forest Resources

California's forests provide much of the state's water supply, forest products, wildlife habitat, carbon sequestration, and recreation, The Sierra Nevada region alone receives approximately 60% of the state's precipitation, providing water for about 23 million Californians. Both urban and rural populations benefit from healthy upland watersheds, yet California's forests are increasingly vulnerable to catastrophic wildfire and other threats that are compounded by climate change.

Between 2006 and 2010, wildfires burned an average of more than 900,000 acres in California annually, almost one percent of the total area of the state each year. Together, state and federal agencies spend approximately \$1.2 billion per year on wildfire management, yet wildfires continue to increase in size and impact property, public health and safety.²

Studies and demonstration projects have shown that bioenergy production using excess forest biomass material helps to reduce the risks and impacts of wildfire and provides other benefits to forest health, including habitat and water quality.³ By utilizing the excess biomass generated as a byproduct of forest fuel treatment activities and sustainable forest management, bioenergy generation helps to reduce dangerous fuel loads and also reduces the need to utilize the more conventional methods of site preparation and hazard reduction such as "broadcast burning" or "pile and burn" that can be additive to the concern over particulate matter and greenhouse gases.⁴ Processing this excess biomass in the woods and delivering it to bioenergy production facilities would create business opportunities in rural communities that currently have few employment options.

¹Water Education Foundation. Looking to the Source: Watersheds of the Sierra Nevada. Sacramento, CA, 2011.

²2012 Bioenergy Action Plan, California State Resources Agency, page 8.

³USDA Forest Service, Pacific Southwest Research Station. *Biomass to Energy: Forest Management for Wildfire Reduction, Energy Production, and Other Benefits*. California Energy Commission, Public Interest Energy Research (PIER) Program. CEC-500-2009-080, 2009.

⁴Bruce Springsteen, Tom Christofk, Steve Eubanks, Tad Mason, Chris Clavin, and Brett Storey, "Emission Reductions from Woody Biomass Waste for Energy as an Alternative to Open Burning." Journal of the Air and Waste Management Association, Vol. 61, January 2011, pp. 63-68.







Protection and Enhancement of Carbon Storage

Next to oceans, forests are the largest source for global carbon storage. California forests currently sequester about 30 MMT CO2E annually. The AB 32 Scoping Plan suggests that California's forests can store an additional 5 MMT of CO2E annually.

Wildfire is the dominant influence on forest carbon flux and sequestration today. In fire-prone forests of the west, large releases of greenhouse gases occur when trees are killed or partially killed by wildfire. As stated earlier, releases also occur when excess forest biomass is piled and burned as a result of hazardous fuels reduction activities. Research has suggested that one of the most efficient ways to safely store carbon in forests of the Sierra Nevada is to accumulate it in large standing trees and protect them from severe fires. Forest management practices have been developed to accomplish this objective through forest thinning, prescribed fire, and active forest management. For a multitude of legal, liability and ecological reason, forest thinning and active forest management are often the preferred treatments where many forests stands have accumulated fuel loads that prevent the safe use of prescribed fire. These treatments can also produce timber, in addition to biomass, that can be processed into forest products, creating economic activity in rural areas and providing long-term carbon storage.

California's Disadvantaged Communities

The Air Resources Board's draft concept paper provides detailed maps of disadvantaged communities selected using CalEnviroScreen generated scores. This methodology utilizes 19 indicators to address key categories such as burden of pollution and population characteristics. The results of this screening process highlight disadvantaged communities located in urban settings and the agricultural regions of central and southern California. Many of California's rural communities located in forested regions are in a state of economic decline due to a variety of factors, including the closure of 84 sawmills since 1989. Very high unemployment rates continue to plague the forested regions as communities seek ways to diversify rural economies while improving forest health and promoting a wildfire defensible environment.

The draft concept paper proposes priorities for investing the auction proceeds. Focus appears to have been placed on urban and agriculture communities solely based on CalEnviroScreen scores. Rural communities located in forested regions are conspicuously absent. These communities are some of the hardest hit economically and

⁵CalFire 2010.

⁶W. Stewart, R.F. Powers, K. McGown, L. Chiono, and T. Chuang. *Potential Positive and Negative Environmental Impacts of Increased Woody Biomass Use for California*. California Energy Commission. Publication Number: CEC □500 □2011 □036, 2011. ⁷Springsteen, pp. 63-68.

⁸M. Hurteau and M. North. Fuel treatment effects on tree □ based forest carbon storage and emissions under modeled wildfire scenarios. Frontiers in Ecology and the Environment, Vol. 7, 2009, pp. 409 □ 414.

⁹California Forestry Association, Paul F. Ehinger and Associates, April 2008.







must not be overlooked as they represent significant opportunities for advancing renewable energy sources.

Development of community-scale forest bioenergy projects (consistent with Senate Bill 1122) would provide family-wage employment for rural communities while utilizing excess forest biomass as feedstock in the production of base-load renewable energy. This business model is consistent with the Governor's Clean Energy Jobs Plan (development of 12,000 MW of renewable distributed generation by 2020). Strategically located community-scale forest bioenergy projects would supplement California's aging bioenergy infrastructure. In the last four years, five of the first generation forest biopower generation facilities have closed, representing almost 70MW of forest biopower generation capacity. As the existing fleet of 28 biopower facilities continue to age, there will be a compelling need to replace this generation capacity with latest generation technologies.

Recommendations for the 2013-2016 Investment Plan

- 1. Priorities for investing auction proceeds must be inclusive of forest communities as they represent attractive opportunities for advancing legislative intent to deploy renewable energy generation. Numerous forest communities in California meet many of the Cal EPA identification criteria as listed on pages 7 and 8 of the Draft Concept Paper.
- 2. Investment should target early phase development and deployment of community-scale forest bioenergy technologies. Early phase investment in transformative technologies like forest biomass gasification and low carbon fuels will yield long-term return on investment.
- 3. Invest in hazardous forest fuels reduction activities located on forest landscapes at risk to catastrophic wildfire (Cal Fire has mapped the high-threat areas), including acreage near communities and upland watersheds.







We applaud the Air Resources Board continued focus on clear strategies to support investment in key sectors of California's economy that address climate change.

Thank you for your time and consideration.

Sincerely,

Tom Christofk, Air Pollution Control Officer Placer County Air Pollution Control District

Northern California Society of American Foresters

Matt Greene, President

California Licensed Foresters Association